CLAIMS

We Claim:

1. A recombinant nucleic acid encoding an Mkinase protein, comprising a nucleic acid sequence having at least about 95% identity to the full length nucleic acid sequence set forth in SEQ ID NO:1, wherein said Mkinase protein will bind to a Traf4 protein.

2. The recombinant nucleic acid according to Claim 1, comprising the nucleic acid sequence set forth in SEQ ID NO:1.

3. A recombinant nucleic acid encoding an Mkinase protein, which protein comprises an amino acid sequence having at least about 95% identity to the full length amino acid sequence set forth in SEQ ID NO:2, wherein said Mkinase protein will bind to a Traf4 protein.

4. The recombinant nucleic acid according to Claim 3, wherein said Mkinase protein comprises the amino acid sequence set forth in SEQ ID NO:2.

5. An expression vector, comprising the recombinant nucleic acid according to any one of Claims 1-4 operably linked to regulatory sequences recognized by a host cell transformed with the nucleic acid.

6. A host cell, comprising the recombinant nucleic acid according to any one of Claims 1-4.

7. A host cell, comprising the expression vector according to Claim 5.

8. A process for producing an Mkinase protein, comprising culturing the host cell according to Claim 6 or 7 under conditions suitable for expression of said Mkinase protein.

9. The process according to Claim 8, further comprising recovering said Mkinase protein.

10. A recombinant Mkinase protein, comprising an amino acid sequence encoded by any one of the nucleic acids according to Claims 1-4.

11. A recombinant Mkinase protein, comprising an amino acid sequence having at least about 95% identity to the full length amino acid sequence set forth in SEQ ID NO:2, wherein said Mkinase protein will bind to Traf4.

12. The recombinant Mkinase protein according to Claim 11, comprising the amino acid sequence set forth in SEQ ID NO:2

13. An isolated polypeptide, which specifically binds to the Mkinase protein according to any one of Claims 10-12.

14. The polypeptide according to Claim 13, comprising an antibody.

15. The polypeptide according to Claim 14, comprising a monoclonal antibody.

16. The polypeptide according to Claim 15, wherein said monoclonal antibody reduces or eliminates the biological activity of said Mkinase protein.

17. A method for screening for a bioactive agent capable of binding to an Mkinase protein, comprising:

a) combining an Mkinase protein and a candidate bioactive agent; and

b) determining the binding of said candidate bioactive agent to said Mkinase protein;

wherein said Mkinase protein comprises an amino acid sequence having at least about 95% identity to the full length amino acid sequence set forth in SEQ ID NO:2, and wherein said Mkinase protein will bind to Traf4.

18. A method for screening for a bioactive agent capable of interfering with the binding of an Mkinase protein to Traf4, comprising:

a) combining an Mkinase protein and a candidate bioactive agent and Traf4; and

b) determining the binding of said Mkinase protein and said Traf4;

wherein said Mkinase protein comprises an amino acid sequence having at least about 95% identity to the full length amino acid sequence set forth in SEQ ID NO:2, and wherein said Mkinase protein will bind to Traf4 in the absence of said candidate bioactive agent.

19. The method according to Claim 18, wherein said Traf4 and said Mkinase protein are combined first.

20. A method for screening for a bioactive agent capable of modulating the activity of an Mkinase protein, comprising:

a) contacting a candidate bioactive agent to a cell comprising a recombinant nucleic acid encoding an Mkinase protein; and

b) determining the effect of said candidate bioactive agent on said cell;

wherein said Mkinase protein comprises an amino acid sequence having at least about 95% identity to the full length amino acid sequence set forth in SEQ ID NO:2, and wherein said Mkinase protein will bind to Traf4 in the absence of said candidate bioactive agent.

21. The method according to any one of Claims 17-20, wherein said Mkinase protein comprises the full length amino acid sequence set forth in SEQ ID NO:2.

22. The method according to Claim 20, wherein a library of candidate bioactive agents is added to a plurality of cells comprising a recombinant nucleic acid according to any one of Claims 1-4.